

CLAIMS

1. A method of producing a treated textile, comprising steps of:

5 (1) preparing a treatment liquid comprising a water- and oil-repellent agent which comprises at least one fluorine-containing compound selected from the group consisting of a fluorine-containing polymer and a fluorine-containing low molecular weight compound,

10 (2) adjusting pH of the treatment liquid to at most 7,

(3) applying the treatment liquid to a textile,

(4) treating the textile with steam, and

(5) washing the textile with water and dehydrating the textile,

15 wherein the treatment liquid comprises a water-soluble cationic polymer.

2. The method according to claim 1, wherein the fluorine-containing polymer comprises:

20 (I) a repeating unit derived from a monomer having a fluoroalkyl group.

3. The method according to claim 1, wherein the fluorine-containing polymer comprises:

25 (I) a repeating unit derived from a monomer having a

fluoroalkyl group, and

(II) a repeating unit derived from a fluorine-free monomer,
and/or

(III) a repeating unit derived from a crosslinkable monomer.

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4. The method according to claim 1, wherein the water-soluble cationic polymer is at least one selected from the group consisting of a polyallylamine salt, a polydiallylmethylamine salt, a polydiallylmethyl ammonium salt, a polyaminoalkyl (meth)acrylate quarternary salt, a polyaminomethyl acrylamide salt, polyethyleneimine, a polyamine modified product, a polyamide polyamine-epichlorohydrin reaction product, a cationically modified polyacrylamide, a melamine-formaldehyde resin, a urea-formaldehyde resin, a dicyanamide-formaldehyde resin and a cationically modified starch.

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5. The method according to claim 1, wherein the water-soluble cationic polymer is a polyallylamine salt or cationically modified polyacrylamide.

6. The method according to claim 1, wherein water- and oil-repellent agent contains the water-soluble cationic polymer.

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7. The method according to claim 1, wherein pH of the treatment liquid is adjusted to at most 4 in the step (2).

8. A textile obtained by the method according to
5 claim 1.

9. A carpet obtained by the method according to claim
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10 10. The carpet according to claim 9, wherein the carpet comprises a nylon fiber, a polypropylene fiber and/or a polyester fiber.

11. A treatment liquid usable in a method of treating
15 a textile, comprising steps of:

(1) preparing a treatment liquid comprising a water- and oil-repellent agent which comprises at least one fluorine-containing compound selected from the group consisting of a fluorine-containing polymer and a fluorine-containing low
20 molecular weight compound,

(2) adjusting pH of the treatment liquid to at most 7,

(3) applying the treatment liquid to a textile,

(4) treating the textile with steam, and

(5) washing the textile with water and dehydrating the
25 textile,

wherein the treatment liquid comprises a water-soluble cationic polymer.

12. A method of producing the treatment liquid according to
5 claim 11, wherein the water-soluble cationic polymer is added to a polymerizable monomer before the polymerization of the fluorine-containing polymer, whereby the water- and oil-repellent agent is prepared.

10 13. A method of producing the treatment liquid according to claim 11, wherein after the fluorine-containing polymer is polymerized or after the fluorine-containing low molecular weight compound is synthesized, the water-soluble cationic polymer is added to the fluorine-containing polymer or the
15 fluorine-containing low molecular weight compound, whereby the water- and oil-repellent agent is prepared.

14. A method of producing the treatment liquid according to claim 11, wherein the water-soluble cationic polymer is
20 added to the water- and oil repellent agent, whereby the treatment liquid is prepared.